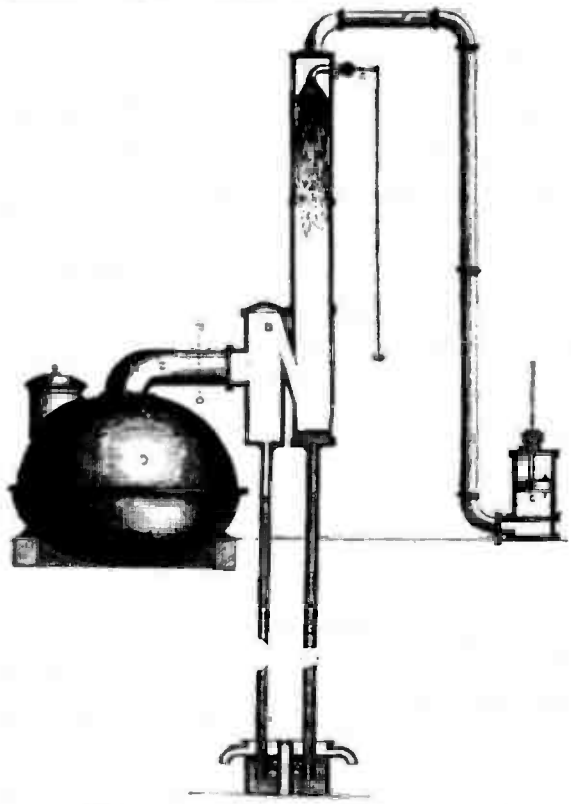
substituting a direct and more imposing entrance in a line with Westbourne-terrace, in lieu of the present circuitous route. It proposes also to afford the opportunity of opening a more convenient entrance to the adjoining gardens. The present one, though very inadequate, from its size, for the convenience of the numbers that are constantly passing through it in fine weather, still is duly appreciated by the public, who had, previous to its formation, to go round by the above-named gateway. These entrances would be brought under one superintendence. To gain a more gradual ascent, and to afford room for carriages on entering or going out, the gateway is placed 145 feet back from the line of road, and an open space left in front of it. This design proposes a double carriage-entrance with a footway on either side. The centre forms a circular temple, in which a statue of her Majesty might be placed.* On the west side, adjoining the foot entrance, a lodge is proposed, with a campanile, containing two very essential accompaniments to a park entrance (though seldom adopted), namely, a striking clock and a bell to warn the public of the time for closing the gardens, in lieu of the present vocal chorus by the keepers of "All out." To carry out the notion effectually, the main road would have to be raised gradually from the present gateway to Stanhope-terrace. This would prove beneficial in every respect.

Mr. Beaumont also points out the want of *drinkable* water in this neighbourhood, and suggests the formation of an *artesian well* in the vacant plot fronting Stanhope-terrace, which would afford an opportunity for an ornamental monument.

IMPROVEMENT IN THE STEAM-ENGINE.

SUGAR HOUSES.

LAST year I obtained a patent for certain improvements in the manufacture of sugar. One of these improvements consists in a new form of condensing apparatus for the vacuum-pan, which I consider to be equally applicable to the steam-engine. The following sketch and description of the vacuum-pan condenser will explain it. I presume I need hardly observe, that in applying this condenser to the steam-engine, the receiver B would be unnecessary. G.



D, the vacuum-pan; B, the receiver; H, a pipe inserted into the bottom of the receiver B (it is 34 feet long, and is shown broken in the drawing: it dips into the small box R, which is filled with water); A, the condenser; E, the injection-cock for the admission of cold water; C, the air-pump; F, the pipe of communication between the air-pump C and the condenser A; G, a pipe inserted into the bottom of the condenser A: it is of the same length as the pipe H, and dips into a similar box, Q, filled with water.

The following description will explain the mode of action. Any "liquor" which boils out of the vacuum-pan D falls into the receiver B, and from thence down the pipe H into the box R, from whence it flows away into some suitable vessel. By this means the necessity of shutting off the air-pump and destroying the vacuum, in the event of a "boiling over" out of the vacuum-pan, is entirely obviated. The steam from the "liquor" in the vacuum-pan D passes into the receiver B, and from thence into the condenser A, where it meets the injection-water coming in an *opposite* direction, by which it is condensed and falls through the pipe G into the vessel Q, from whence it runs away. By this mode of condensation the entire of the condensed water may, if desired, be obtained at 212 deg. Fahr. whilst the top of the condenser is quite cold.

As the whole of the steam which is produced in the vacuum-pan (with the exception of that of vacuum tension) will be condensed by the above described plan, it must be obvious that the air-pump will have much less work to perform than in the ordinary way, consequently a much smaller air-pump will be sufficient.

As there may be sugar houses where there is not sufficient height to enable these improvements to be carried out in the manner described, the following substitutes may be used. First: Instead of the pipes G and H, small pumps may be applied in their places. Second: The exhaust arm Z of the vacuum-pan D may be carried up such a height as will give the necessary elevation for the condenser A. For the purpose of preventing any condensation of steam in the exhaust arm Z, this arm might be encased in another pipe into which steam could be admitted.

* In the drawing, the side piers, ornamented with sculpture, seem too large, as compared with the campanile, &c. The point, however, with us is the general question, not the particular design.

SCULPTURE AND IRON.

THE GREAT EXHIBITION.

WE are informed that a well-proportioned room for sculpture has been set apart in the Exhibition Building, 70 feet by 48, and 30 feet high. The following arrangement of colours has been suggested by a sculptor. The floor stained dark oak, the pedestals of the statues dark crimson, the *walls a warm grey, of an atmospheric retreating quality*, the ceiling light grey, and a centre concentrated light of 36 feet by 12, with a thin white linen spread *beneath*. The arrangement of colours is different from that hitherto received as appropriate for sculpture-rooms, but would, we have no doubt, be effective. The neutral tint of the walls would afford a distinct yet soft fleshy outline to the marble and plaster, and the dark floor preserve the works from the upward reflective gleam so injurious—in the British Museum, for instance.

No bronzes are to be admitted in this apartment, another place being found for them in the fine-art room. It is probable, and to be hoped, that in neither of these rooms will be admitted statues above life size, for which spaces will be found appropriate to them in the nave and transept.

In the west nave there is to be a cast-iron open-work dome, the joint emanation of the Coalbrook Dale Company and Mr. Bell, sculptor. It is supported on six double pillars, is of elaborate rustic cast-iron work bronzed, and to the top of the weather-vane (formed by a statuette of "Eolus"), is 49 feet, weighing 15 tons.

A cast-iron park-entrance from the same foundry, 60 feet wide, of elaborate decoration, is to be placed across the north transept. The pillars, we are told, are of novel construction in cast-iron, bronzed, with finials of fine-art character, and large vases at the two ends of the fencing.

In front of this last is to be a cast-metal fountain of Cupid and a swan, life size, in a tazza 7 feet across, decorated with an ornamentation of the white and yellow water-lily,—the whole in a basin 13 feet in diameter.

SOCIETY OF BRITISH ARTISTS, SUFFOLK-STREET.

THE present exhibition consists of 693 pictures and drawings, by 317 exhibitors: of these works, 183 are by the members of the society, twenty-seven in number, being an average of seven each. It contains several pictures of very considerable merit, and many that are very pleasing, but is not a collection that will give our foreign visitors a very elevated opinion of the state of art amongst us, being wanting in the higher efforts of the mind,—works which come of thought and give thought,—the picture that teach and elevate.

Mr. Hurlstone stands on this occasion high above his colleagues. He has been painting in Spain, and has brought back some vivid and life-like representations of the denizens of that beautiful and unhappy country. (184) "A Spanish Girl of Alcala de Guadaira;" (222) "A Spanish Girl, Sevillana;" (490) "An Andalusian Girl, with a Water Jar;" and (494) "A Gitana;" are all equally characteristic and beautiful: (141) "A Street Scene in Seville" is damaged by the countenances of the models.—In 423 Mrs. Hurlstone has given a view of the artist in his Spanish studio.

Mr. J. W. Allen has several excellent transcripts of nature: (11) "South Downs," (56) "Near Cranley," and (446) "Foot of the Wrekin," may be particularly mentioned.

Mr. Baxter's "Rose, Shamrock, and Thistle" (42), three female heads, is full of beauty; and his portrait of Topham (327) an admirable likeness.

Mr. Gale's Studies of Heads are also very excellent (9, 90, and 475).

Mr. Anthony exhibits several pictures of wonderful power, which in some, however, degenerates to coarseness. (24) "The Old Churchyard" is a fine specimen of those strong sunlight effects which he strives after, but we prefer (505) "A Dewy Day." (357) "A Rocky Lane—Sunshine after a Shower,"

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